

REPORT NUMBER: 120-MGA-05-005

HS#
637934

**SAFETY COMPLIANCE TESTING FOR
FMVSS NO. 120
TIRE SELECTION AND RIMS
FOR MOTOR VEHICLES OTHER THAN PASSENGER CARS**

**Blue Bird Corporation
2005 Vision School Bus
NHTSA No.: C50901**

**PREPARED BY:
MGA RESEARCH CORPORATION
5000 WARREN ROAD
BURLINGTON, WI 53105**



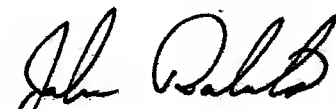
Final Report Date: July 19, 2005

FINAL REPORT

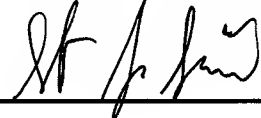
**PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
400 SEVENTH STREET, SW, ROOM 6115 (NVS-224)
WASHINGTON, D.C. 20590**

This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names or products are mentioned it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

Prepared by:  Date: July 19, 2005
James Hansen, Project Manager

Reviewed by:  Date: July 19, 2005
John Roberts, Project Engineer

FINAL REPORT ACCEPTED BY OVSC:



7/22/05

Date of Acceptance

Technical Report Documentation Page

1. Report No. 120-MGA-05-005		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Final Report of FMVSS 120 Compliance Testing of 2005 Blue Bird Vision School Bus NHTSA No.:C50901				5. Report Date July 19, 2005	
				6. Performing Organization Code MGA	
7. Author(s) James Hansen, Project Manager John Roberts, Project Engineer				8. Performing Organization Report No. 120-MGA-05-005	
9. Performing Organization Name and Address MGA Research Corporation 5000 Warren Road Burlington, WI 53105				10. Work Unit No.	
				11. Contract or Grant No. DTNH22-02-D-01057	
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Enforcement Office of Vehicle Safety Compliance 400 Seventh St., S.W. Room 6115 (NVS-224) Washington, D.C. 20590				13. Type of Report and Period Covered Final Report 06/28/05 - 07/19/05	
				14. Sponsoring Agency Code NVS-224	
15. Supplementary Notes					
16. Abstract A test was conducted on a 2005 Blue Bird Vision School Bus, NHTSA No. C50901, in accordance with FMVSS 120, "Tire selection and rims for motor vehicles other than passenger cars," and TP-120-03. The vehicle was weighed in the unloaded and fully loaded conditions and its tires, rims, and related information were checked. Test failures were as follows: None					
17. Key Words Compliance Testing Safety Engineering FMVSS 120				18. Distribution Statement Copies of this report are available from: NHTSA Technical Information Services (TIS) Room 2336 (NAD-405) 400 Seventh Street, S.W. Washington, D.C. 20590 (202) 366-4946	
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 32	
				22. Price	

TABLE OF CONTENTS

<u>Section</u>		<u>Page No</u>
1	Purpose of Compliance Test	1
2	Test Procedure and Discussion of Results	2
3	Compliance Test Data	4
	Data Sheet 1- General Tire and Rim Data	5
	Data Sheet 2 - Certification and Tire Label Information	7
	Data Sheet 3 - Weight Distribution	8
4	Test Equipment List and Calibration Information	10
5	Photographs	13

SECTION 1
PURPOSE OF COMPLIANCE TEST

The purpose of this test report is to document the results of tests performed on a MY2005 Blue Bird Corporation Vision School Bus, NHTSA No.: C50901, in accordance with the requirements stated in Federal Motor Vehicle Safety Standard (FMVSS) No. 120, "Tire Selection and Rims for Motor Vehicles other than Passenger Cars."

This standard establishes requirements to ensure that applicable vehicles are equipped with tires of adequate size and load rating and rims of appropriate size and type designation.

SECTION 2

TEST PROCEDURE AND DISCUSSION OF RESULTS

Testing of the 2005 Blue Bird Corporation Vision School Bus conducted at MGA Research Corporation – Wisconsin Operations in accordance with NHTSA TP-120-03, dated April 10, 2000 and MGA-TP-120-03 dated November 20, 2002. The vehicle mounted tires and rims were surveyed to ensure that the rims were suitable for the tires and that the tires inflated to the maximum inflation pressure stated on the tire sidewall were appropriate for the vehicle's certified Gross Axle Weight Ratings (GAWR). The vehicle certification and tire information labeling was surveyed to ensure that the vehicle manufacturer's recommended rims were suitable for the recommended tires, and that the recommended tires inflated to the recommended inflation pressures stated on the labeling were appropriate for the vehicle's certified GAWRs. The vehicle was ballasted and weighed in three different loading conditions to determine if axle or tire overloading could occur. The three loading conditions were:

Condition 1 – Unloaded Vehicle Weight (UVW).

Condition 2 – Vehicle in Condition 1 state plus the addition of ballast to simulate
Thirty-nine passengers (one adult driver and thirty-eight students),.

Condition 3 – Vehicle in Condition 2 state plus the addition of ballast to simulate
cargo loading. Target vehicle load is the certified gross weight
rating (GVWR).

The vehicle mounted tires inflated to the inflation pressure labeled on the tire sidewall have a load rating appropriate to carry the maximum loads as required by FMVSS No. 120. The vehicle rims are suitable for the vehicle tires and contain the required markings.

SECTION 2...continued
TEST PROCEDURE AND DISCUSSION OF RESULTS

Test Lab: MGA Research-Wisconsin Operations **Contract No:** DTNH22-02-D-01057

Vehicle Make/Model: Blue Bird /Vision **MY:** 2005

NHTSA No.: C50901 **VIN:** 1BAKGCKH05F227003 **Vehicle Type:** School Bus

Incomplete Veh. Make/Model: N/A

Designated Seating Capacity: 39, (1 driver, 38 passengers)

Dealer Installed Optional Accessories: None Noted

Summary

Requirements	PASS/FAIL
TIRE AND RIM SELECTION (S5.1) Installed tires and rims are suitable for vehicle	PASS
Rim Marking (S5.2) Rims contain all required markings of proper dimensions	PASS
LABEL INFORMATION (S5.3) Vehicle has proper certification/tire information label. Label tires at recommended inflation pressure and rims are suitable for vehicle.	PASS
Weight Distribution (49 CFR 567 Certification) Vehicle loaded with occupants and cargo does not exceed GVWR	PASS
Results: Test data indicates compliance with FMVSS 120	PASS

SECTION 3
COMPLIANCE TEST DATA

**FMVSS 120 – DATA SHEET 1
GENERAL TIRE AND RIM DATA**

Test Vehicle: **2005 Blue Bird Corp. Vision School Bus**
Test Lab: **MGA Research-Wisconsin Operations**

NHTSA No.: **C50901**
Test Date: **6/28/05**

GENERAL DATA

Tire Type: (Passenger car or other)	TRUCK/BUS
Are the tire and rim sizes the same for all axles, including the spare?	YES
Does the tire size fitted to the axles appear on the Certification or Tire label? (If NO, describe)	YES
Number of axles	2
Dual tires on rear axle(s)	YES

TIRE DATA FROM SIDEWALL

	RIGHT FRONT	SPARE
Manufacturer	Michelin	
Brand	XZE	
Tire Size	11R22.5	
Maximum Tire Load Rating (KG)	2800-Single 2850-Dual	
De-rated Tire Load Rating (KG)	N/A	
Maximum Inflation Pressure (KPA)	720	
Tire has DOT symbol (Yes/No)	Yes	
DOT serial number	DOT M53T A7MX 2404	

**MOUNTED TIRE VS. AXLE RATING COMPARSION
(AT SIDEWALL MAXIMUM INFLATION PRESSURE)**

	FRONT AXLE	REAR AXLE
A. GAWR (KG) from certification label	4537	9528
B. (No. of tires) x (tire load rating (KG) from above table)	5600	10600
C. Is "B" equal to or greater than "A"? (Yes/No)	Yes	Yes

**FMVSS 120 – DATA SHEET 1...continued
GENERAL TIRE AND RIM DATA**

Test Vehicle: **2005 Blue Bird Corp. Vision School Bus**
Test Lab: **MGA Research-Wisconsin Operations**

NHTSA No.: **C50901**
Test Date: **6/28/05**

RIM MARKINGS

	RIGHT FRONT	SPARE
Source of published dimensions (letter designation)	T	
Rim Size	22.5 x 7.5	
Does rim contain DOT symbol? (Yes/No)	Yes	
Manufacturer's name, symbol or trademark (copy format)	Accuride	
Date of manufacture or symbol	06 01 04	
Do items A-C appear on weather side of rim? (Yes/No)	Yes	
Letter height (not less than 3mm)	Yes – 3.5 mm	
Lettering (impressed or embossed)	Impressed	
Are all rim markings legible? (Yes/No)	Yes	
Do all markings comply with requirements? (Yes/No)	Yes	
Rims are suitable for tires on vehicles? (Yes/No)	Yes	

RIM MEASUREMENTS

	RIGHT FRONT	SPARE
Rim width	191 mm (7.5")	
Rim diameter	551 mm (22.5")	
Rim measurements same as rim markings? (Yes/No)	Yes	

RESULTS	PASS/FAIL
TIRE AND RIM SELECTION (S5.1) Installed tires and rims are suitable for vehicle	PASS
Rim Marking (S5.2) Rims contain all required markings of proper dimensions	PASS

Remarks: **NONE**

Tested By:  Approved By: 
Date: June 28, 2005

**FMVSS 120 - DATA SHEET 2
CERTIFICATION AND TIRE LABEL INFORMATION**

Test Vehicle: **2005 Blue Bird Corp. Vision School Bus**
Test Lab: **MGA Research-Wisconsin Operations**

NHTSA No.: **C50901**
Test Date: **6/28/05**

LABEL INFORMATION

Label Design (Combined Certification and Tire Label):	Yes
Label Design (Separate Tire Information Label):	N/A
Label in English? (Yes/No)	Yes
Block capital letter and numbers are not less than 2.4 mm in height (yes/no):	Yes
Label is permanently affixed; describe method of affixing (rivets, glue, etc.)	glue
Does label text color contrast with background? (yes/no)	Yes
Location of Label(s) on the vehicle:	Above Driver's Side Window

TIRE AND RIM DATA FROM LABEL (FOR EACH GAWR/GVWR)

GVWR: 13612 KG	FRONT AXLE	REAR AXLE
Tire Size	11R22.5	11R22.5
Rim Size	7.5 x 22.5	7.5 x 22.5
Recommended inflation pressure (KPa)	723	723
Are labeled rims suitable for labeled tires (Yes/No) ¹	Yes	Yes
Referenced load rating at label recommended inflation pressure (KG) ¹	2800	2650

¹ Referenced source for tire/rim match and load rating data: 2005 Tire and Rim Assoc.

CERTIFICATION/TIRE LABEL MAXIMUM CAPACITY COMPARISON

GVWR: 13612 KG	FRONT AXLE	REAR AXLE
A. GAWR (kg) FROM CERTIFICATION LABEL	(C) 4537	(D) 9528
B. (No. of tires) x (Tire load rating (KG))	5600	10600
Is "B" equal or greater than "A"? (Yes/No)	Yes	Yes
Is (C) plus (D) equal to or greater than GVWR? (Yes/No)	Yes	

RESULTS	PASS/FAIL
LABEL INFORMATION (S5.3) Vehicle has proper certification/tire information label. Label tires at recommended inflation pressure and rims are suitable for vehicle.	PASS

Tested By: 

Approved By: 

Date: June 28, 2005

**FMVSS 120 - DATA SHEET 3
WEIGHT DISTRIBUTION**

Test Vehicle: **2005 Blue Blrd Corp. Vision School Bus**
Test Lab: **MGA Research-Wisconsin Operations**

NHTSA No.: **C50901**
Test Date: **6/28/05**

Fluid Levels				
Fuel:	FULL			
Coolant:	FULL			
Other Fluids: <u>Washer fluid, brake fluid, etc.</u>	FULL			
Tire Pressures				
Tire	Left Front	Right Front	Left Rear	Right Rear
Tire Pressure (KPa)	723	723	723	723
Occupant and Cargo Loads				
Total Occupant Load (kg): [# of designated seating positions x 68 KG per adult or 54 KG per student]			2120 (1-driver, 38-students)	
Manufacturer's Rated Cargo Load (kg): [If not stated on vehicle or provided in owner's manual leave blank]			N/A	
Certified GVWR - Measured UVW - Total Occupant Load = Rated Cargo Load <u>13612</u> KG - <u>8608</u> KG - <u>2120</u> KG = <u>2884</u> KG (must be positive)				
Describe Placement of Cargo:		Center of aisle Fore to Aft distribution		

Weight Distribution

ITEM	Tire or Vehicle Rating* (KG)	CONDITION 1 UVW (KG)		CONDITION 2 Cond. 1 + occupants (KG)		CONDITION 3 Cond. 2 + cargo (KG)	
		Measured	Overload	Measured	Overload	Measured	Overload
Left Front Tire	2800	1546	NO	1480	NO	1584	NO
Right Front Tire	2800	1516	NO	1548	NO	1620	NO
Front Axle	4537	3062	NO	3028	NO	3204	NO
Left Rear Tire	5300	2676	NO	3660	NO	5018	NO
Right Rear Tire	5300	2868	NO	4096	NO	5372	YES**
Rear Axle	9528	5544	NO	7756	NO	10390	YES**
Total Vehicle	13612	8608	NO	10784	NO	13594	NO

* - Vehicle and axle weight ratings (GVWR & GAWR) are located on the vehicle certification label plate. Vehicle tire load ratings are based upon the inflation pressure specified on the certification label plate for each respective axle, as determined from the appropriate tire manufacturer's specification table.

** - For condition 3, the target total vehicle load was the vehicle's GVWR. The amount and placement of the cargo ballast was arbitrary. The total cargo ballast load could have been reduced and redistributed to ensure that none of the tire, axle, or vehicle ratings were exceeded.

FMVSS 120 – DATA SHEET 3...continued
WEIGHT DISTRIBUTION

Test Vehicle: **2005 Blue Bird Corp. Vision School Bus**
Test Lab: **MGA Research-Wisconsin Operations**

NHTSA No.: **C50901**
Test Date: **6/28/05**

RESULTS	PASS/FAIL
Weight Distribution (49 CFR 567 Certification) Vehicle loaded with occupants and cargo does not exceed GVWR	PASS

Remarks:

Tested By:  Approved By: 
Date: June 28, 2005

SECTION 4
INSTRUMENTATION AND EQUIPMENT LIST

Test Vehicle: **2005 Blue Bird Corp. Vision School Bus**
Test Lab: **MGA Research-Wisconsin Operations**

NHTSA No.: **C50901**
Test Date: **6/28/05**

	Digital Caliper	Vehicle Scale	Tape Measure
Make	Mitutoyo	GSE	Stanley
Model	CD-6" CS	Pro-Weigh 84	Powerlock
Serial # (s)	0441288	212091/212092	SN152
Range	0-150mm	0 to 20,000 lb	0-8 m
Accuracy	.01mm	0.25% static	1 mm
Cal. Date	4/1/05	6/10/05	5/31/05
Cal. Due Date	10/1/05	12/10/05	11/31/05

INSTRUMENTATION AND EQUIPMENT LIST

Test Vehicle: 2005 Blue Bird Corp. Vision School Bus
Test Lab: MGA Research-Wisconsin Operations

NHTSA No.: C50901
Test Date: 6/28/05

SCALE CALIBRATION SHEET

Jack Seard

REPORT OF INSPECTION AND CALIBRATION
 Operating Under A2LA Accreditation #2006.01; Performed by Certified Scale Inc. N57 W13840 Carmen Avenue,
 Menomonee Falls, WI 53051. As Directed by: **MDA Research Corporation**

TYPE: DIGITAL FLOOR	CLASS: III	MODEL: 405	CAPACITY: 20,000
MANUFACTURER: GSE	SERIAL #: 00404	ID# NONE	MAX. LOAD: 15,000
LOCATION: BUS AND TRUCK RAY	MINIMUM DIVISION: 5		UNITS: Lbs

TEST STANDARDS AND PROCEDURES USED FOR THIS CALIBRATION	NIST TRACEABLE TEST STANDARDS USED FOR THIS CALIBRATION
PLEASE REFER TO TEST CERTIFICATION AND UNCERTAINTY POLICY WHICH PART OF SCALE MAINTENANCE AND CALIBRATION PROCEDURE MANUAL; SERIAL #MSR-7044.1	500# NUMBERS: (811) THRU 8121 + 0.02 - 0.1 + 0.02
<input checked="" type="checkbox"/> THERE WAS NO DEVIATION IN PROCEDURE AS WRITTEN	500# NUMBERS: 8119.65 THRU raw
<input type="checkbox"/> DEVIATION FROM PROCEDURE IS NOTED HEREIN	1000# NUMBERS: NSI A100 THRU NSI A114
TEST STANDING CONDITIONS	SUBSTITUTION LOAD: <input type="checkbox"/> NONE
PLEASE REFER TO TEST STANDARD TRACEABILITY DOCUMENT AS PART OF SCALE MAINTENANCE AND CALIBRATION PROCEDURE MANUAL; SERIAL #MSR-7044.1	TEMPERATURE: 70° F HUMIDITY: 53% AIR MOVEMENT: limited
VIBRATION: limited OTHER: none	LOCATION OF TEST STAND: AS CONTRACTOR

FUNCTIONALITY; as left	<input checked="" type="checkbox"/>	REPEATABILITY/SENSITIVITY; as left	<input checked="" type="checkbox"/>	PHYSICAL CONDITION; as left	<input checked="" type="checkbox"/>	SUITABILITY FOR INTENDED USE	<input checked="" type="checkbox"/>
				THIS TEST WAS CONDUCTED AT CERTIFIED SCALE INC. FACILITY, MENOMONEE FALLS, WI THIS TEST WAS CONDUCTED WITHIN THE CUSTOMER FACILITY, LOCATED AT: 5000 Warren Road, Burlington, WI 53105 SUBCONTRACTED TO:			

TEST POINT	As Found			As Left	As Left			TOLERANCES	
	EXPECTED VALUE	MEASURED VALUE	ERROR		MEASURED VALUE	ERROR	LOW LIMIT	HIGH LIMIT	
SCALE IN									
DISTRIBUTION	1000	948	10	✓ 1000	0	✓	996	1005	
DISTRIBUTION	2000	1985	15	✓ 2000	0	✓	1996	2006	
DISTRIBUTION	3000	2985	15	✓ 3000	0	✓	2990	3010	
DISTRIBUTION	4000	3975	25	✓ 4000	0	✓	3990	4010	
DISTRIBUTION	5000	4970	30	✓ 5000	0	✓	4990	5010	
DISTRIBUTION	10,000	9950	50	✓ 10000	0	✓	9980	10,020	
DISTRIBUTION	15,000	14930	70	✓ 15000	0	✓	14,970	15,030	
DISTRIBUTION	18,000	17910	90	✓ 18000	0	✓	17,980	18,040	
SCALE OUT									
APPROVED									

As Found: ☐ ACCEPT ☒ REJECT ☐ As Left: ☒ ACCEPT ☐ REJECT ☐ ACTION PENDING: ☐

STATEMENT OF ESTIMATED UNCERTAINTY AND CONFIDENCE

☐ ESTIMATED UNCERTAINTY OF THIS CALIBRATION IS: BY CBI TYPE EVALUATION DEFAULT, WITH A CONFIDENCE LEVEL OF 95%.

☒ UNCERTAINTY OF THIS CALIBRATION IS UNKNOWN BY STATISTICAL CALCULATION ASSUMED EQUAL TO 100% OF THE MINIMUM VALID DIVISION.

Technician's Comments/Observations/Notes: **unit not in factory condition due to damaged main cable, adjusted covers and zeroed 3 span calibration**

MSR-100204

THIS REPORT IS VALID ONLY TO THE DEVICE IDENTIFIED IN THE LOCATION SPECIFIED AS PART OF THIS REPORT.

The serial number of this report is: **000005 MGA 01**. This report may not be duplicated without written consent of Certified Scale Inc.

Report, page **(1)** of **(1)** was completed on **6-10-05** by **[Signature]**

Next scheduled Full Calibration is due **12-05** Next Preventive Maintenance visit is due **None**

Revision: 0 Certified Scale Inc. - Quality Procedure Manual - Controlled Document R-510L1RJC (File #5.10.c)

SECTION 4...continued
INSTRUMENTATION AND EQUIPMENT LIST

Test Vehicle: **2005 Blue Bird Corp. Vision School Bus**
Test Lab: **MGA Research-Wisconsin Operations**

NHTSA No.: **C50901**
Test Date: **6/28/05**

SCALE CALIBRATION SHEET

REPORT OF INSPECTION AND CALIBRATION <small>Operating Under A2LA Accreditation #2006.01; Performed by Certified Scale Inc. N57 W13640 Carmen Avenue, Menomonie Falls, WI 53061. As Directed by MGA Research Corporation</small>									
TYPE: DIGITAL FLOOR		CLASS: III		MODEL: 405		CAPACITY: 20,000			
MANUFACTURER: GSE		SERIAL #: 00000		IDP: NONE		MAX. LOAD: 15,000			
LOCATION: BUS AND TRUCK RAY		MINIMUM DIVISION: 5				UNITS: Lbs.			
TEST AND INSPECTION STANDARDS USED FOR THIS CALIBRATION PLEASE REFER TO TEST STANDARDS AND UNCERTAINTY POLICY UNDER PART OF SCALE MAINTENANCE: CONFORMANCE									
INSPECTION PROCEDURE MANUAL: SERIAL # MSA-7041.1 <input checked="" type="checkbox"/> THERE WAS NO DEVIATION IN PROCEDURE AS WRITTEN. <input type="checkbox"/> DEVIATION FROM PROCEDURE IS NOTED HERE: NONE		CONFORMANCE 500# NUMBERS: 1-100 THRU 800 1000# NUMBERS: 1-100 THRU 1000 SUBSTITUTION LOAD: NONE		TEST STANDARDS TEMPERATURE: 70 PLACEMENT: 22.5 AIR MOVEMENT: 0.00 VERIFICATION: 1000					
FUNCTIONALITY: as left <input checked="" type="checkbox"/> REPEATABILITY/SENSITIVITY: as left <input checked="" type="checkbox"/> PHYSICAL CONDITION: as left <input checked="" type="checkbox"/> SUITABILITY FOR INTENDED USE <input checked="" type="checkbox"/>									
TEST POINT	AS FOUND			AS LEFT			TOLERANCES		
	EXPECTED VALUE	MEASURED VALUE	ERROR	MEASURED VALUE	ERROR	LOW LIMIT	HIGH LIMIT		
SCALE #									
DISTRIBUTION	1000	1000	0	1000	0	995	1005		
DISTRIBUTION	2000	1995	5	2000	0	1995	2005		
DISTRIBUTION	3000	2995	5	3000	0	2990	3010		
DISTRIBUTION	4000	3990	10	4000	0	3980	4010		
DISTRIBUTION	5000	4990	10	5000	0	4980	5010		
DISTRIBUTION	10,000	9990	10	10,000	0	9980	10,020		
DISTRIBUTION	15,000	14970	30	15,000	0	14,970	15,030		
DISTRIBUTION	18,000	17,960	40	18,000	0	17,960	18,040		
SCALE #									
AS FOUND: ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/> AS LEFT: ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/> ACTION PENDING: <input type="checkbox"/>									
<input type="checkbox"/> ESTIMATED UNCERTAINTY OF THIS CALIBRATION IS BY CMI TYPE EVALUATION DEPART. WITH A CONFIDENCE LEVEL OF 90%. <input checked="" type="checkbox"/> UNCERTAINTY OF THIS CALIBRATION IS UNKNOWN BY STATISTICAL CALCULATION, ASSUMED EQUAL TO 20% OF THE MINIMUM VALID DIVISION.									
Technician's Comments/Observations/Options: As per calibration <div style="text-align: right;">M.W.D. APPROVED</div>									

* THIS REPORT IS APPLICABLE ONLY TO THE DEVICE AND POINT OF LOCATION SPECIFIED AS PART OF THIS REPORT.
 The serial number of this report is **01005515601**. This report may not be reproduced without written consent of Certified Scale Inc.
 Report, page **(2)** of **(3)** was completed on **6/28/05** by **[Signature]**
 Next scheduled Full Calibration is due **12-05** Next Preventive Maintenance visit is due **10-05**
 Date Date
 Revision - 0 Certified Scale Inc. - Quality Procedure Manual - Controlled Document R-5101.1(RIC (File #5.10.1)

SECTION 5
PHOTOGRAPHS

TABLE OF PHOTOGRAPHS

<u>No.</u>		<u>Page No.</u>
1	Three-Quarter Frontal View of Left Side of Test Vehicle	15
2	Three-Quarter Rear View from Left Side of Vehicle	16
3	Vehicle Certification/ Tire Information Label	17
4	Right Front Tire Manufacturer	18
5	Right Front Tire Model Number	19
6	Right Front Tire DOT Serial Number	20
7	Right Front Tire Load Ratings	21
8	Right Front Tire Size Designation	22
9	Right Front Rim Manufacturer	23
10	Right Front Rim DOT, Rim Size, and Source of Published Information, and Date of Manufacture Markings	24
11	Vehicle on Scales Doing Measurement of Front Axle Loads	25
12	Vehicle on Scales Doing Measurement of Rear Axle Loads	26
13	Simulated Occupant Loading	27
14	Simulated Cargo Loading	28

Test Vehicle:
Procedure:

2005 Blue Bird Vision School Bus
FMVSS 120

NHTSA No.: C50901



Three-Quarter Frontal View of Left Side of Test Vehicle

Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

NHTSA No.: C50901



Three-Quarter Rear View from Left Side of Vehicle

Test Vehicle:
Procedure:

2005 Blue Bird Vision School Bus
FMVSS 120

NHTSA No.: C50901

MANUFACTURED BY
BLUE BIRD BODY COMPANY
DATE OF MFR. 09/04
SUITABLE TIRE - R/T CHOICE
GVWR : 13612 KG (30000 LB.)
GAWR : FRONT 4537 KG (10000 LB.) WITH 11RX22 5G TIRES
7 50X22 5 RIMS AT 723 KPA (105 PSI) COLD SINGLE
GVWR : REAR 9528 KG (21000 LB.) WITH 11RX22 5G TIRES
7 50X22 5 RIMS AT 723 KPA (105 PSI) COLD DUAL
- THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S.
FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN
EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE
V.I.N. 1BAKGCXH05F227003 TYPE CLASSIFICATION SCHOOL BUS

Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

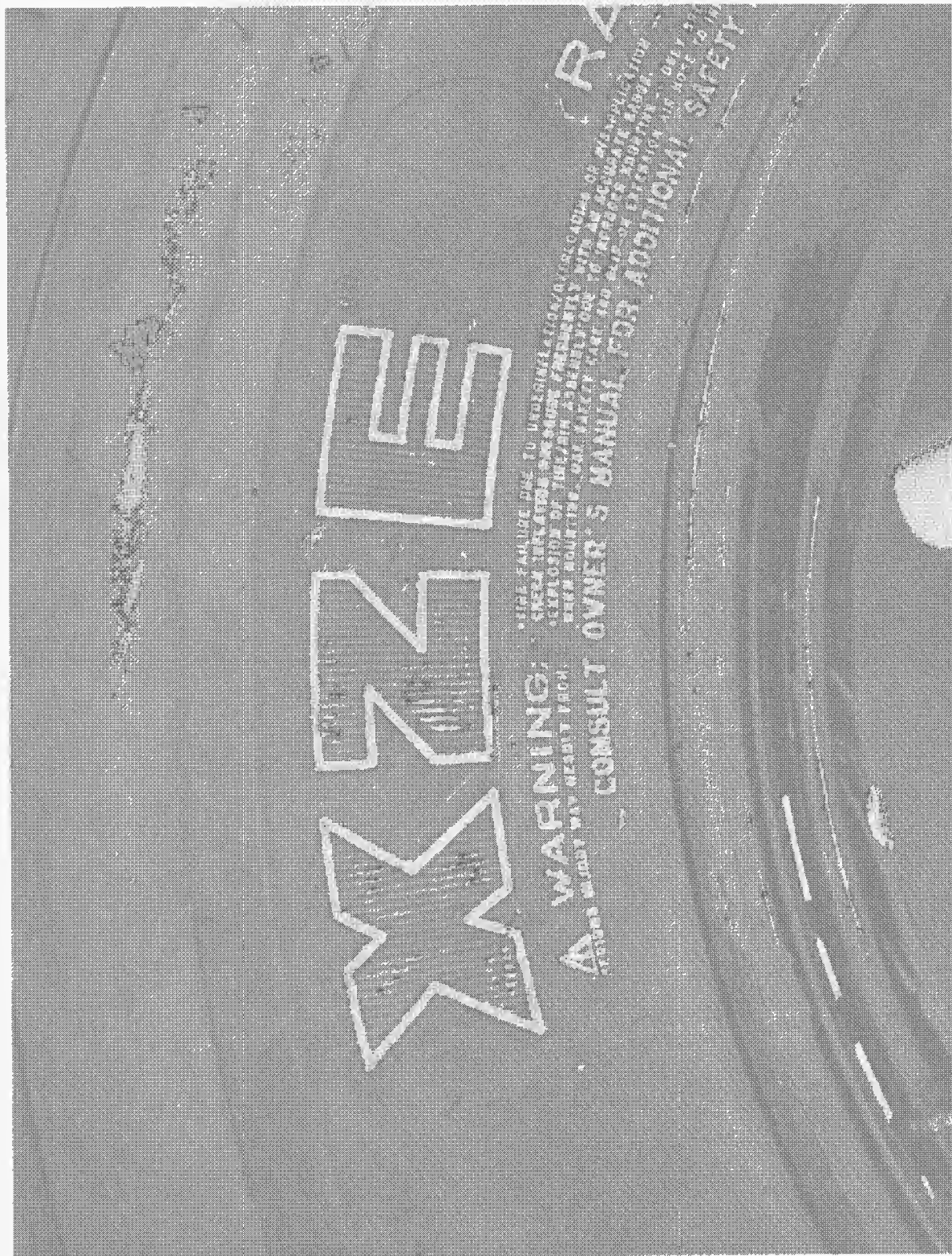
NHTSA No.: C50901



Right Front Tire Manufacturer

Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

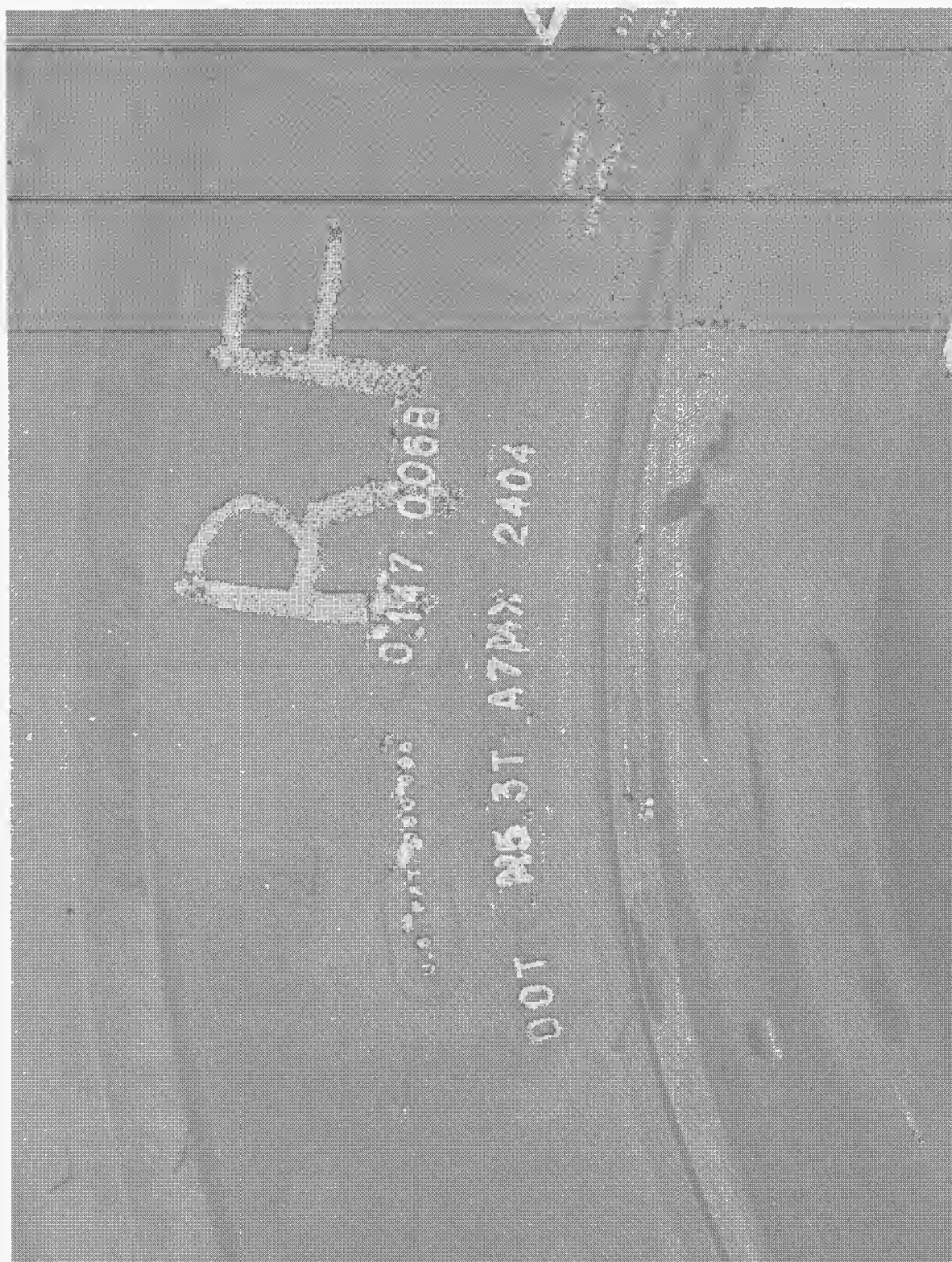
NHTSA No.: C50901



Right Front Tire Model Number

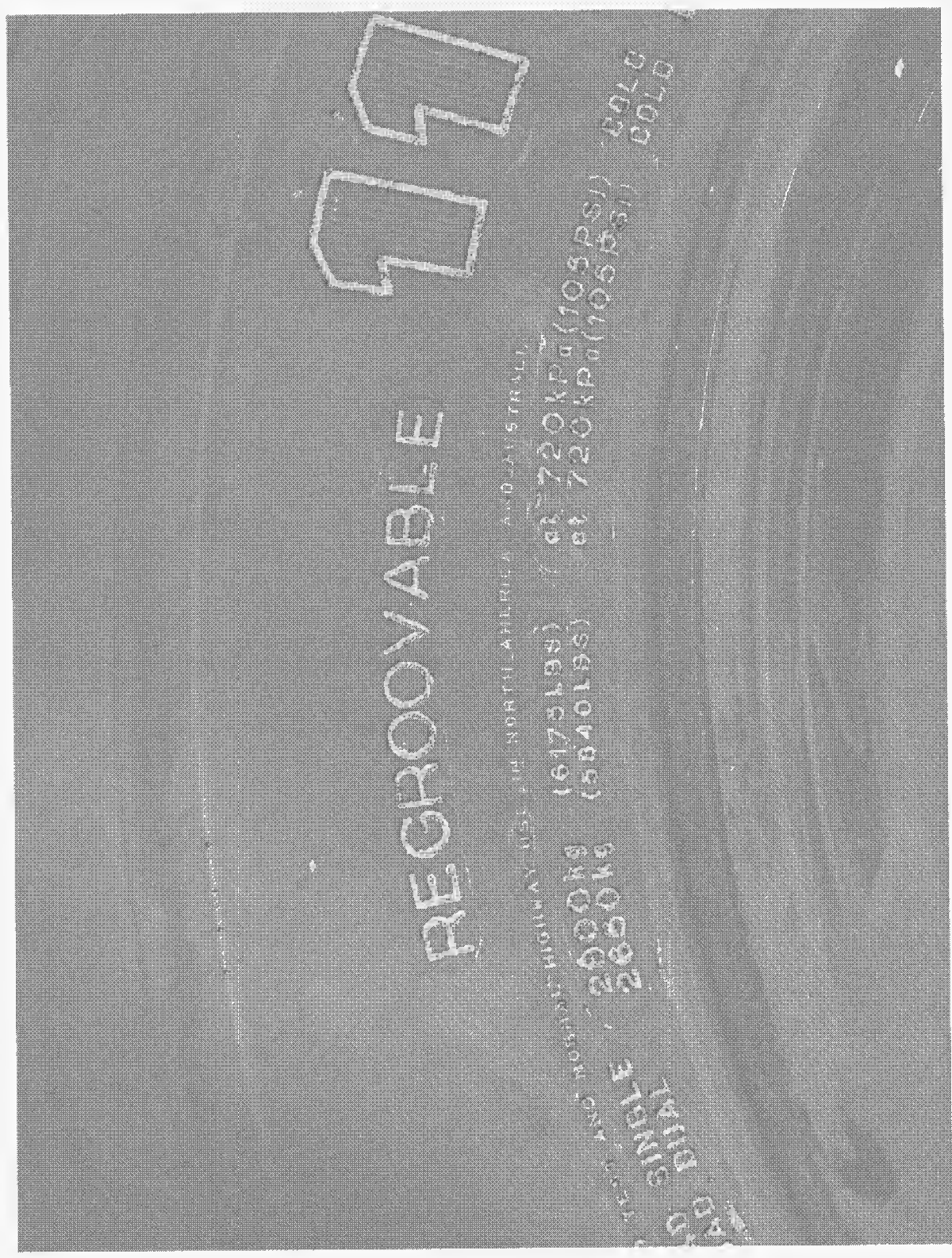
Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

NHTSA No.: C50901



Right Front Tire DOT Serial Number

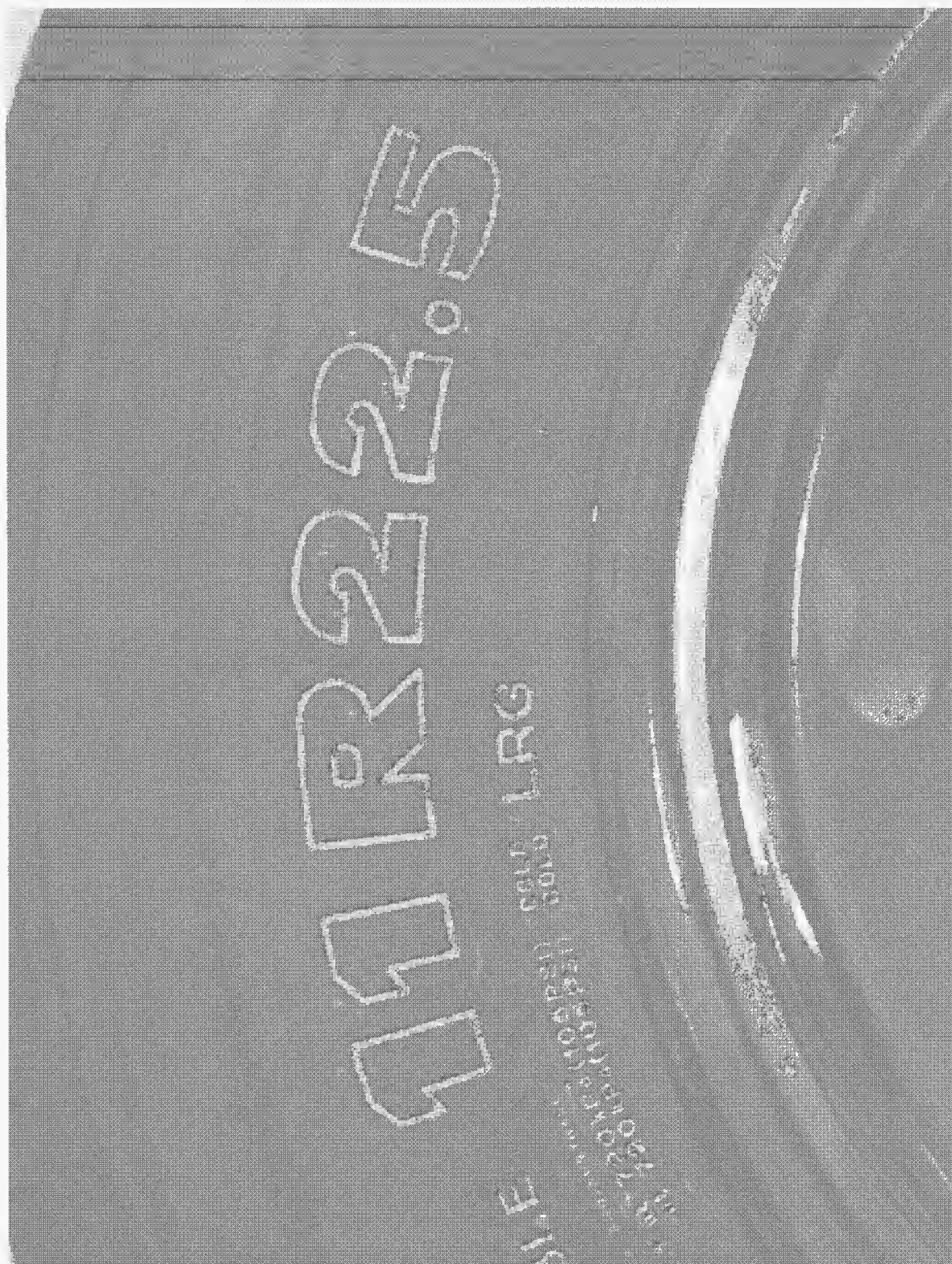
Test Vehicle: 2005 Blue Bird Vision School Bus
 Procedure: FMVSS 120
 NHTSA No.: C50901



Right Front Tire Load Ratings

Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

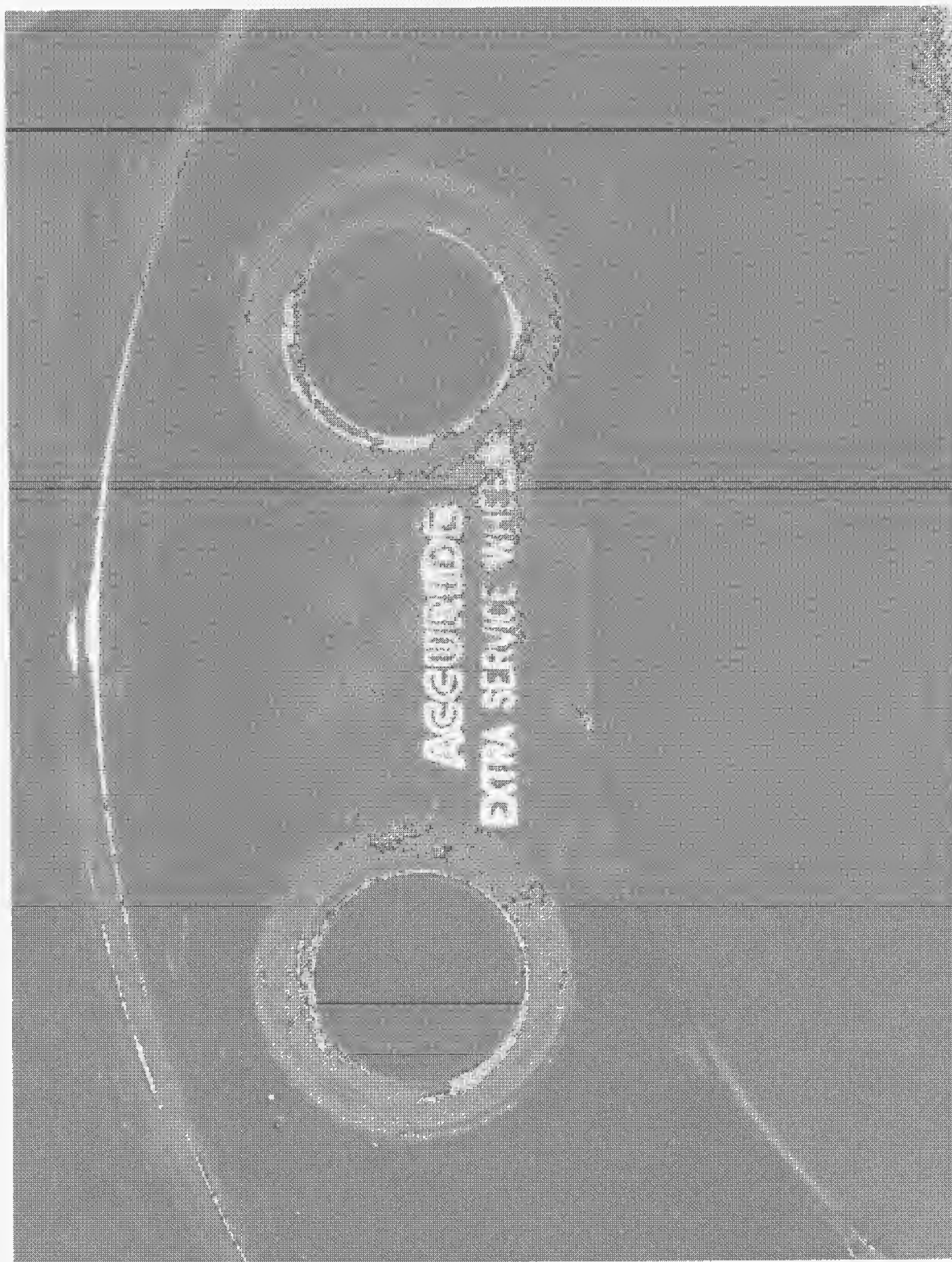
NHTSA No.: C50901



Right Front Tire Size Designation

Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

NHTSA No.: C50901



Right Front Rim Manufacturer

Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

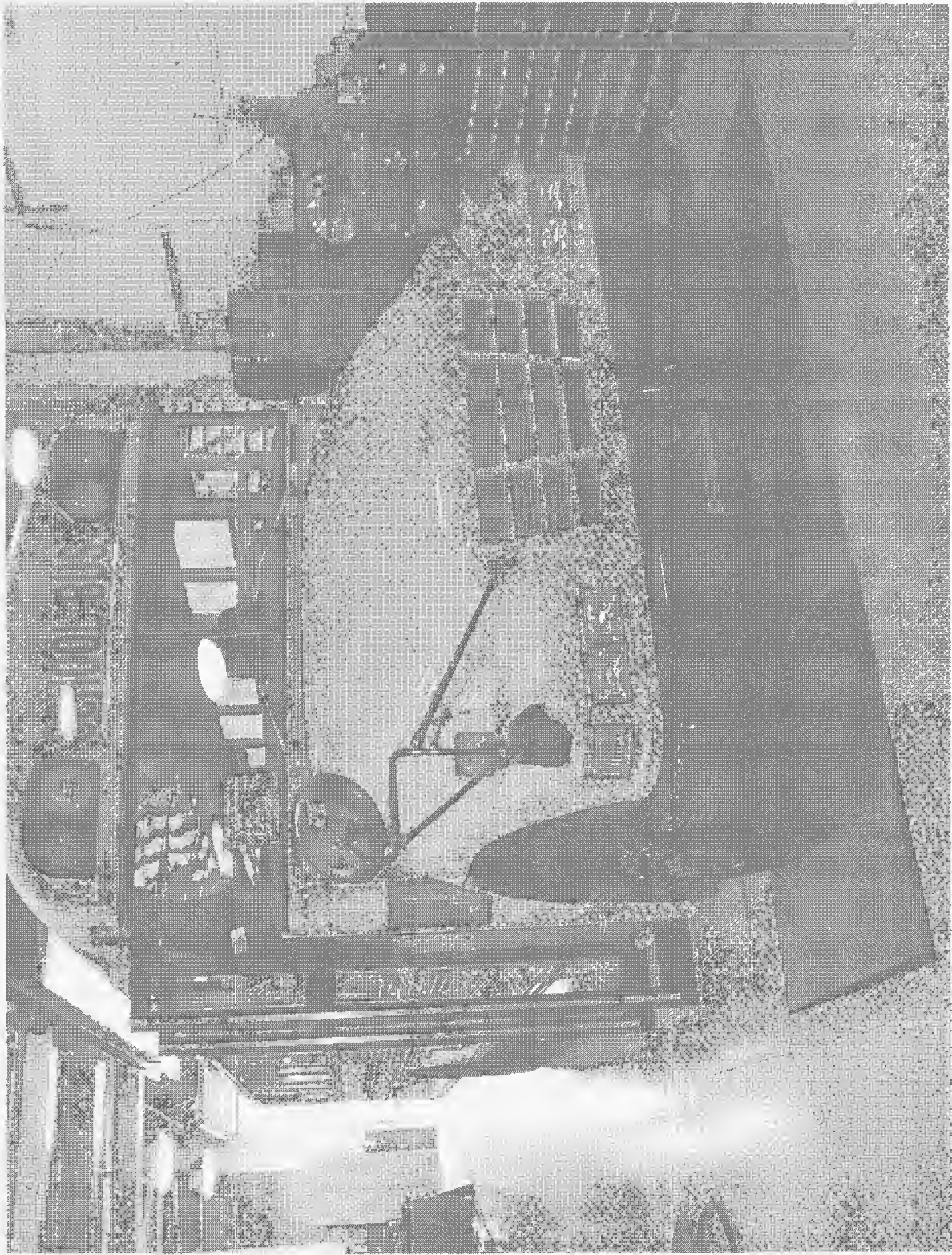
NHTSA No.: C50901



Right Front Rim DOT, Rim Size, Source of Published Information, and Date of Manufacture Markings

Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

NHTSA No.: C50901



Vehicle on Scales Doing Measurement of Front Axle Loads

Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

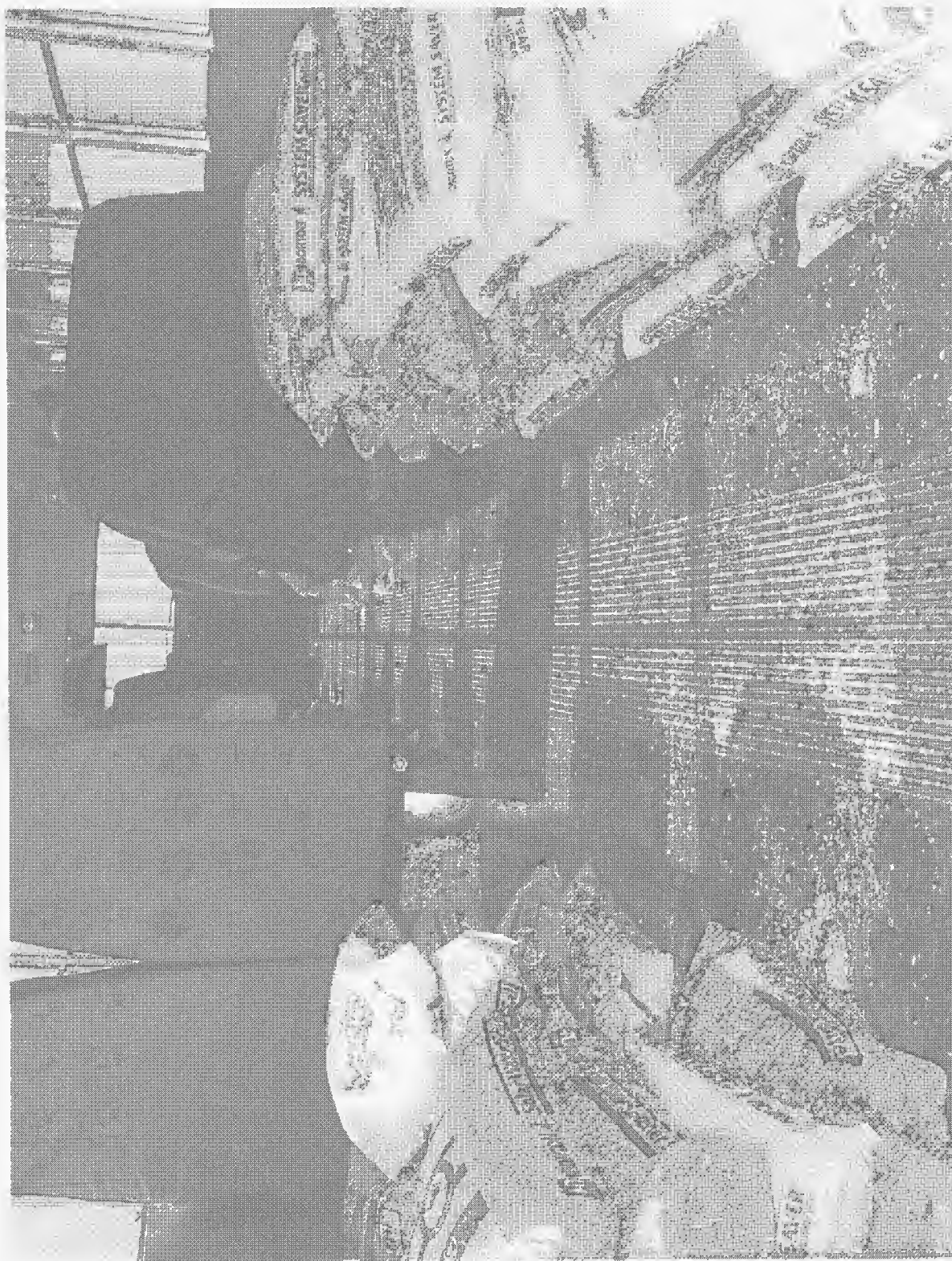
NHTSA No.: C50901



Vehicle on Scales Doing Measurement of Rear Axle Loads

Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

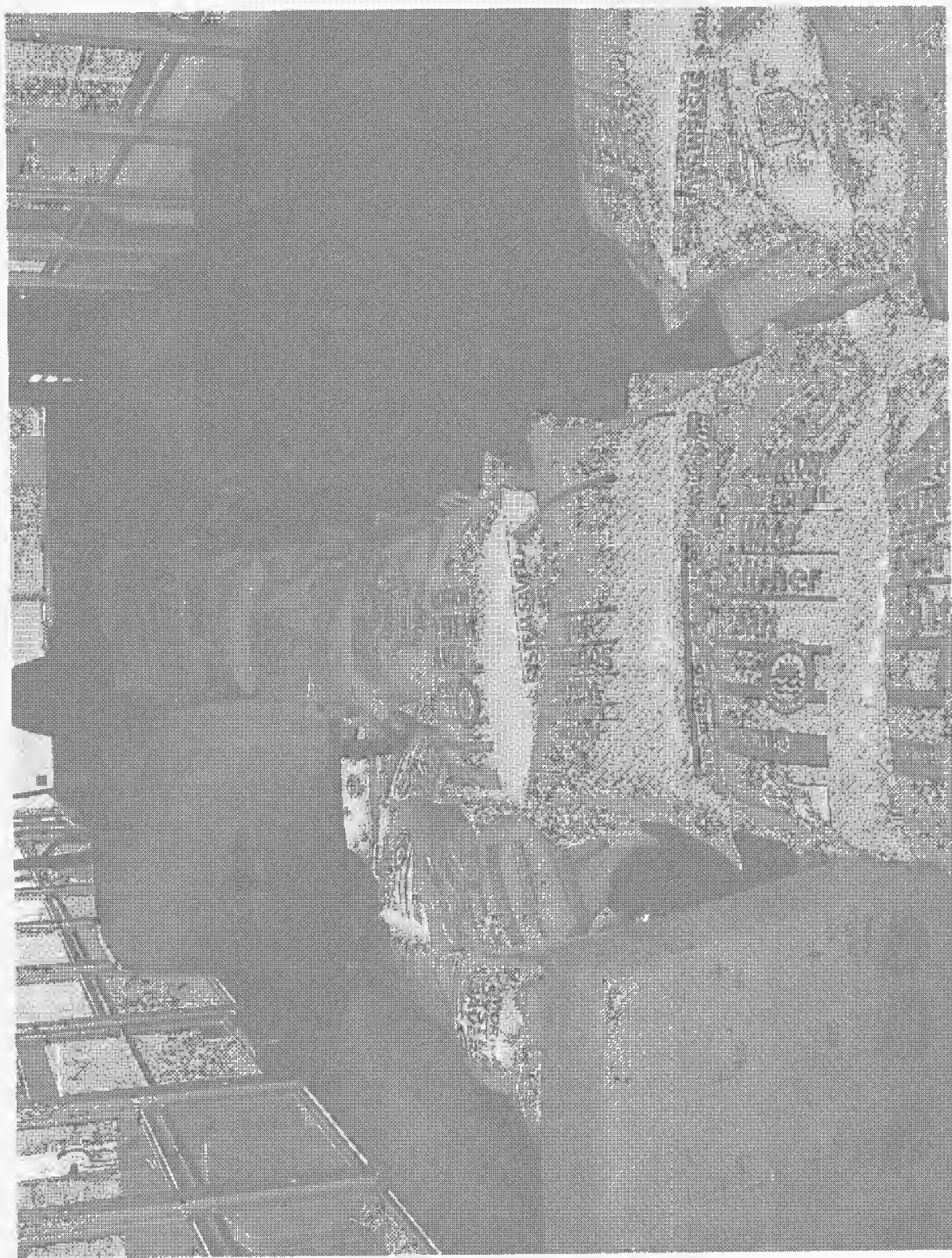
NHTSA No.: C50901



Simulated Occupant Loading

Test Vehicle: 2005 Blue Bird Vision School Bus
Procedure: FMVSS 120

NHTSA No.: C50901



Simulated Cargo Loading